

DETAILED ACTION

Allowable Subject Matter

Claims 1-35 are allowed.

The following is an examiner's statement of reasons for allowance:

Referring to claim 1, the Malvar reference (US Patent 6,496,795 B1) discloses a method for using a computing device to: compute a set of complex-valued gains for each subband of a frequency-domain decomposition of microphone array signal inputs for each of a plurality of beam widths within a range of beam widths (*fig. 12*), search the sets of complex-valued gains to identify a single set of complex-valued gains for each frequency-domain subband and for each of a plurality of target focus points (*fig. 12*). The Malvar reference taken alone or in combination with another reference, does not disclose, teach or fairly suggest a lowest total noise energy in relation to the frequency range and each said set of complex-valued gains individually selected as the set of complex-valued gains having a lowest total noise energy relative to corresponding sets of complex-valued gains for each frequency-domain subband as recited in independent claim 1.

Claims 15 & 26 are allowable for the same reason stated above.

Claims 2-14 depend on claim 1. Claims 16-25 depend on claim 15. Claims 27-35 depend on claim 26.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George C. Monikang whose telephone number is 571-270-1190. The examiner can normally be reached on M-F. alt Fri. Off 7:30am-5:00pm (est).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chin Vivian can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Vivian Chin/
Supervisory Patent Examiner, Art Unit 2615